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PATENT ABSTRACTS OF JAPAN

(11)Publication number:

09-181350

(43) Date of publication of application: 11.07.1997

(51)Int.Cl.

H01L 31/10

G01J 1/02

(21)Application number : **07-350343**

(71)Applicant: MITSUBISHI CABLE IND LTD

(22) Date of filing:

21.12.1995

(72)Inventor: KANO AKIRA

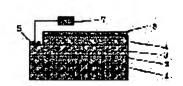
WATABE SHINICHI

TADATOMO KAZUYUKI

(54) METHOD FOR DETECTING SHORT WAVELENGTH LIGHT

(57)Abstract:

PROBLEM TO BE SOLVED: To form a detection device excellent in light-weight property, compactness and portability easily by forming a GaN based semiconductor layer having a pn junction on a substrate such that at least one of p-type and n-type semiconductor layers detects a light of short wavelength through a photodetector comprising a specific semiconductor layer.



SOLUTION: A photodetector has pn junction structure where a p-type semiconductor layer 4 is formed on an n-type semiconductor layer 3 which may be an undoped layer. At least one of p-type and n-type semiconductor layers in a GaN based semiconductor layer forming the pn junction of photodetector is represented by a general formula; InxGayAl1-x-yN (where, 0<x≤1, 0≤y≤1). This structure

formula; InxGayAl1-x-yN (where, $0 < x \le 1$, $0 \le y \le 1$). This structure realizes a photodetector exhibiting high sensitivty to the light in short wavelength region of 200-500nm, especially to the light in UV region.

LEGAL STATUS

[Date of request for examination]

26.04.2002

[Date of sending the examiner's decision of

10.01.2006

rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or

application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]